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PATENT

Attorney Docket No.: 018512-005920US

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By: Karen Karlin

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Timothy James Jegla

Application No.: Not yet assigned

Filed: Herewith

For: KV10.1, A NOVEL VOLTAGE-GATED POTASSIUM CHANNEL FROM HUMAN BRAIN

Examiner: Not yet assigned

Art Unit: Not yet assigned

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached forms PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the references can be found in Application No. 09/833,466, filed April 11, 2001 (Attorney Docket No. 018512-005910US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.


As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

  
Annette S. Parent  
Reg. No. 42,058

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60177715 v1

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	
				Filing Date	
				First Named Inventor	
				Art Unit	
				Jegla, Timothy James	
Examiner Name					
Sheet	1	of	3	Attorney Docket Number	
				018512-005920US	

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	US-5,710,019	01-1998	Li et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	AB	EPO	WO 97/311112	A	08-28-1991	The Johns Hopkins University School of Medicine		<input type="checkbox"/>
	AC	EPO	WO 98/16185	A	4-23-98	NPS Pharmaceuticals, Inc.		<input type="checkbox"/>

Examiner Signature		Date Considered	
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Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number		
			Filing Date		
			First Named Inventor		
			Art Unit		
			Examiner Name		
Sheet	2	of	3	Attorney Docket Number	018512-005920US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AD	Ottshytsch et al., "Obligatory heterotetramerization of three previously uncharacterized Kv channel alpha-subunits identified in the human genome", <i>Proceedings of the National Academy of Sciences</i> 99:12: 7986-7991 (2002).	
	AE	Ottshytsch et al., Homo sapiens voltage-gated potassium channel Kv11.1 mRNA. complete CDS", EMBL Database accession no. AF348983, XP002232488.	
	AF	de Miera et al., "Homo sapiens voltage-gated potassium channel subunit Kv10.1a mRNA, complete cds, alternatively spliced", EMBL Database accession no. AF454547, XP002232490.	
	AG	de Miera et al., "Homo sapiens voltage-gated potassium channel subunit Kv10.1a mRNA, complete cds, alternatively spliced", EMBL Database accession no. AF454548, XP002232491.	
	AH	Pongs, "Molecular Biology of Voltage-Dependent Potassium Channels", <i>Physiological Reviews</i> 72:4: S69-S88 (1992).	
	AI	Pongs, "Structure-Function Studies on the Pore of Potassium Channels", <i>Journal of Membrane Biology</i> 136:1: 1-8 (1993).	
	AJ	Drewe et al., "Distinct Spatial and Temporal Expression Patterns of K <sup>+</sup> Channel mRNAs from Different Subfamilies", <i>Journal of Neuroscience</i> 12:2: 538-548 (1992).	
	AK	Pongs, "Potassium channel nomenclature: a personal view", <i>Trends in Pharmacological Sciences</i> 14:12: 435 (1993).	
	AL	Waterson, "Homo sapiens chromosome 9 clone RP11-535E24, WORKING DRAFT SEQUENCE, 7 unordered pieces", EMBL Database accession no. AC019222, XP002232489.	
	AM	Du, et al., "The K <sup>+</sup> Channel, Kv2.1, Is Apposed to Astrocytic Processes and Is Associated with Inhibitory Postsynaptic Membranes in Hippocampal and Cortical Principal Neurons and Inhibitory Interneurons"; <i>Neuroscience</i> , 84:37-48 (1998)	
	AN	Fink, et al., "A New K <sup>+</sup> Channel $\beta$ Subunit to Specifically Enhance Kv2.2 (CDRK) Expression"; <i>The Journal of Biological Chemistry</i> , 271:26341-26348 (Oct. 1996)	

Examiner Signature		Date Considered	
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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 3 of 3

**Complete if Known**

Application Number	
Filing Date	
First Named Inventor	Jegla, Timothy James
Art Unit	
Examiner Name	
Attorney Docket Number	018512-005920US

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AO	Heinemann, et al., "Functional Characterization of K <sub>v</sub> Channel $\beta$ -subunits from Rat Brain"; <i>Journal of Physiology</i> , 493:625-633 (1996)	
	AP	Hugnot, et al., "Kv8.1, a New Neuronal Potassium Channel Subunit with Specific Inhibitory Properties Towards Shab and Shaw Channels"; <i>EMBO Journal</i> , 15:3322-3331 (1996)	
	AQ	Maletic-Savatic, et al., "Differential Spatiotemporal Expression of K <sup>+</sup> Channel Polypeptides in Rat Hippocampal Neurons Developing <i>in situ</i> and <i>in vitro</i> "; <i>The Journal of Neuroscience</i> , 15:3840-3851 (May 1995)	
	AR	Murakoshi and Trimmer, "Identification of the Kv2.1 K <sup>+</sup> Channel as a Major Component of the Delayed Rectifier K <sup>+</sup> Current in Rat Hippocampal Neurons"; <i>The Journal of Neuroscience</i> , 19:1728-1735 (March 1999)	
	AS	Post, et al., "Kv2.1 and Electrically Silent Kv6.1 Potassium Channel Subunits Combine and Express a Novel Current"; <i>FEBS Letters</i> , 399:177-182 (1996)	
	AT	Salinas, et al., "Modes of Regulation of Shab K <sup>+</sup> Channel Activity by the Kv8.1 Subunit"; <i>The Journal of Biological Chemistry</i> , 272:8774-8780 (March 1997)	
	AU	Salinas, et al., "New Modulatory $\alpha$ Subunits for Mammalian Shab K <sup>+</sup> Channels"; <i>The Journal of Biological Chemistry</i> , 272:24371-24379 (Sept. 1997)	
	AV	Sanguinetti, et al., "Coassembly of K <sub>v</sub> LQT1 and minK (IsK) Proteins to Form Cardiac I <sub>Ks</sub> Potassium Channel"; <i>Nature</i> , 384:80-83 (Nov. 1996)	
	AW	Shi, et al., " $\beta$ Subunits Promote K <sup>+</sup> Channel Surface Expression through Effects Early in Biosynthesis"; <i>Neuron</i> , 16:843-852 (Apr. 1996)	
	AX	Verma-Kurvari, et al., "Regional and Cellular Expression Patterns of Four K <sup>+</sup> channel mRNAs in the Adult Rat Brain"; <i>Molecular Brain Research</i> , 46:54-62 (1997)	
	AY	GenBank Accession Number AC019222.1, submitted Dec. 31, 1999	

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SignatureDate  
Considered

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